

# Kentucky industries generate efficient electricity through CHP

Articles by Eileen Hardy  
Department for Energy Development and Independence

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Every day, more than 4,000 manufacturing facilities in Kentucky transform raw materials into usable products for consumer or industrial use. Manufacturing is Kentucky's greatest source of revenue and leading source of employment. Manufacturing is also a major consumer of energy, with intensive processes such as aluminum smelting, paper milling and chemical production. Although energy costs vary by electric utility, and electricity intensity varies by industry, Kentucky reports that nearly half of the energy consumed in 2013 was used for manufacturing processes.

Historically, Kentuckians have benefited from secure, low-cost electricity. Today, however, the energy landscape is rapidly changing to meet new production demands and environmental regulations. Kentucky's manufacturing sector is also faced with challenges to reduce energy costs and carbon emissions and to stay competitive.



Photo courtesy of Young Manufacturing

Young Manufacturing:  
a convergence of old  
concepts with modern  
technology

## Residential wood heating getting cleaner

EPA standards to address pollution from new wood burning appliances

By Roberta Burnes  
Division for Air Quality

<http://eec.ky.gov/Land%20Air%20Water%20Issues/Winter%202015.pdf>



An outdoor wood boiler, or hydronic heater.  
Photo by Roberta Burnes

Environmental Scientist David Cole to find out what the wood heat standards are expected to mean—and not mean—for homeowners.

**Q: Why the concern over wood smoke?**

**DC:** Smoke from residential wood heaters contains fine particle pollution, also known as fine particulate matter or  $PM_{2.5}$ , along with other pollutants including carbon monoxide, volatile organic compounds (VOCs), black carbon and air toxics such as benzene. Smoke from residential wood heaters, which are used around the clock in some areas, can increase particle pollution to levels that pose serious health concerns. In some areas, residential wood smoke constitutes a significant portion of the fine particle pollution problem.

**Q: I have a wood burning stove in my home. Will the new standards apply to my**

solely by oil, gas or coal. In addition, the proposal would not prohibit or restrict the use of wood-burning appliances for residential heating.

**Q: What wood burning appliances are covered under the new standards?**

**DC:** EPA first issued regulations for residential wood heaters in 1988. That rule applied only to adjustable burn-rate wood stoves (including a type of adjustable burn-rate wood stove known as a fireplace insert). Since that time, the technology for reducing emissions from wood heaters has significantly improved and now is available to make a range of wood heaters more efficient and less polluting. The proposed standards cover newly manufactured adjustable-rate wood stoves, pellet stoves, wood-fired hydronic heaters, forced-air furnaces, masonry wood heaters, and a type of previously unregulated wood stove known as a "single burn-rate" stove.

**Q: What about fireplaces and fireplace inserts?**

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## Bio-burner heated in time for winter cold

Recommend 1.5k 13

Posted: Nov 17, 2014 5:32 PM EST  
Updated: Nov 17, 2014 7:19 PM EST

By Amanda Roberts CONNECT  
By Chad Darnall

<http://www.wpsdlocal6.com/story/27408471/bio-burner-heated-in-time-for-winter-cold>







Lee Energy system installed on Cumberland County, KY poultry farm and performance being monitored in comparison with existing natural gas system in adjacent barns.



COOPERATIVE EXTENSION SERVICE  
UNIVERSITY OF KENTUCKY COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT, LEXINGTON, KY 40546



## Poultry Grower Meeting

**December 9th 2014 @ 10:00am CST**

Clinton County Fairgrounds

Located at 335 Fairgrounds Road in Albany, KY

The meeting is hosted by the Clinton County Cooperative Extension Service  
and the Kentucky Poultry Federation

Speakers for the meeting are:

**Doug Overhults**, *UK Extension Specialist*  
Lighting/Energy Savings

**Scott Laskowski**, *LEI Products President/Owner*  
Biomass/Wood Heating Systems

**Barry Dutton**, *Lubing USA Rep.*  
Drinker Line Management

**Bill McCloskey**, *Governors Office of Ag Policy Area Contact*  
On-Farm Energy Incentive Program